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(d) a sequence that encodes a polypeptide which comprises a SEQ. ID. NO: 2 or 3, an amino acid sequence substantially homologous thereto or a fragment of either sequence,  
under conditions in which the vitamin is produced and, if necessary, isolating the vitamin.

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**REMARKS:**

In the Official Action mailed August 15, 2002, the Examiner issued a restriction requirement under 35 U.S.C. §121 and 372. Applicants respectfully traverse the Examiner's restriction requirement and argue that the restriction requirement is improper because the present application does not lack unity of invention. Claims directed to a vector comprising one or more genes to express, host cells transformed with said vector, and production of a desired compound using said host cells are so linked as to form a single general inventive concept. The inventive concept is formed by the vector.

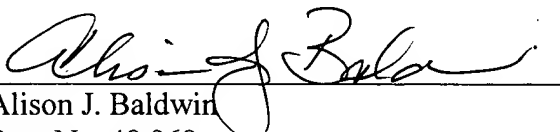
However, in accordance with the requirement under 37 C.F.R. §1.499, Applicant elects Group V, claim(s) 28 and 29, drawn to the process for vitamin B12 production. Claim 28 has been amended in order to convert it from a dependent to an independent claim.

Respectfully submitted,

**McDonnell Boehnen  
Hulbert & Berghoff**

Dated: 9/13/02

By:

  
Alison J. Baldwin  
Reg. No. 48,968

MARKED UP COPY OF THE CLAIMS

28. (Amended) A process for the production of vitamin B<sub>12</sub> (cobalamin), the process comprising culturing a host cell [according to claim 17] containing a polynucleotide comprising a sequence capable of hybridizing selectively to

(e) SEQ ID NO: 1 or the complement thereof;

(f) a sequence from the 3.6 kb plasmid of *Propionibacterium freudenreichii* CBS 101022;

(g) a sequence from the 3.6 kb plasmid of *Propionibacterium freudenreichii* CBS 101023; or

(h) a sequence that encodes a polypeptide which comprises a SEQ. ID. NO: 2 or 3, an amino acid sequence substantially homologous thereto or a fragment of either sequence,

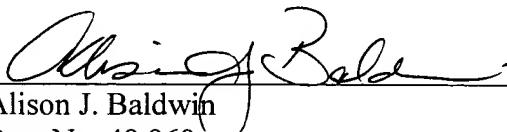
under conditions in which the vitamin is produced and, if necessary, isolating the vitamin.

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